

Abstract Of The Disclosure

Disclosed is a method and apparatus of transmit diversity that is backward compatible and does not significantly degrade performance in additive white gaussian noise (AWGN) conditions using a transmission architecture that incorporates a form of phase sweep transmit diversity (PSTD) referred to herein as biased PSTD. Biased PSTD involves transmitting a signal and a frequency swept version of the same signal over diversity antennas at different power levels. By transmitting the two signals at different power levels, the depths of nulls normally seen in AWGN conditions when PSTD is utilized is reduced and performance degradation in AWGN conditions is mitigated.